In the Claims:

Claim 1 (currently amended): A system comprising:

a valve;

a plurality of RFID sensor assemblies coupled to the valve to monitor a plurality of parameters associated with the valve;

a control tag configured to wirelessly communicate with the respective RFID sensor assemblies ~~tags~~ that are coupled to the valve, the control tag being further configured to communicate with an RF reader; and

an RF reader configured to selectively communicate with the control tag, the reader including an RF receiver. [[:]]

Claim 2 (original): A system in accordance with claim 1 wherein the valve is a fluid-operated valve.

Claim 3 (currently amended): A system in accordance with claim 2 wherein the valve includes a valve positioner, a ~~an electrical~~ conductor, and an I/P transducer coupled to the valve positioner by the ~~electrical~~ conductor, and wherein at least one of the plurality of RFID sensor assemblies is coupled to the ~~electrical~~ conductor.

Claim 4 (original): A system in accordance with claim 2 wherein the valve includes a pneumatic actuator, a valve stem coupled to the pneumatic actuator, and an actuator-valve stem coupler, and wherein at least one of the plurality of RFID sensor assemblies is coupled to the actuator-valve stem coupler.

Claim 5 (original): A system in accordance with claim 2 wherein the valve includes a pneumatic actuator, a valve positioner, and a fluid conduit in fluid communication between the pneumatic actuator and the valve positioner, and wherein at least one of the plurality of RFID sensor assemblies is coupled to the fluid conduit between the pneumatic actuator and the valve positioner.

Claim 6 (previously presented): A system in accordance with claim 2 wherein the valve includes a pneumatic actuator, a valve positioner, a booster, a first fluid conduit in fluid communication between the pneumatic actuator and the booster, a second fluid conduit in fluid communication between the booster and the valve positioner, and wherein at least one of the plurality of RFID sensor assemblies is coupled to the first fluid conduit and at least another one of the plurality of RFID sensor assemblies is coupled to the second fluid conduit.

Claim 7 (original): A system in accordance with claim 6 and further comprising a fluid supply line in fluid communication with the booster, and wherein at least one of the plurality of RFID sensor assemblies is coupled to the fluid supply line.

Claim 8 (original): A system in accordance with claim 7 and further comprising a regulator valve in fluid communication between the fluid supply line and the valve positioner, a conduit between the regulator valve and the valve positioner, and wherein at least one of the plurality of RFID sensor assemblies is coupled to the conduit between the regulator valve and the valve positioner.

Claim 9 (original): A system in accordance with claim 1 and further comprising a conduit upstream of the valve and a conduit downstream of the valve, wherein at least one of the plurality of RFID sensor assemblies is coupled to the conduit upstream of the valve and at least another one of the plurality of the RFID assemblies is coupled to the conduit downstream of the valve.

Claim 10 (original): A system in accordance with claim 1 wherein the valve includes a seat and wherein the RFID sensor assemblies are used to determine valve seating force.

Claim 11 (original): A system in accordance with claim 1 wherein the valve includes a spring and wherein the RFID sensor assemblies are used to determine a spring preload of the spring.

Claim 12 (original): A system in accordance with claim 1 wherein the valve includes a spring and wherein the RFID sensor assemblies are used to determine a spring constant of the spring.

Claim 13 (original): A system in accordance with claim 1 wherein the valve includes a spring and wherein the RFID sensor assemblies are used to determine spring compression.

Claim 14 (original): A system in accordance with claim 1 wherein the RFID sensor assemblies are used to determine a friction load on the valve.

Claim 15 (original): A system in accordance with claim 1 wherein the RFID sensor assemblies are used to determine valve position.

Claim 16 (original): A system in accordance with claim 1 wherein the RFID sensor assemblies are used to determine valve stroke times.

Claims 17-23 (cancelled).

Claim 24 (currently amended): A method of monitoring an industrial process which makes use of a valve, the method comprising:

coupling a plurality of RFID sensor assemblies to the valve to monitor a plurality of parameters associated with the valve;

providing a control tag to wirelessly communicate with the respective RFID sensor assemblies ~~tags~~ that are coupled to the valve, the control tag being configured to communicate with an RF reader; and

selectively communicating with the control tag using an RF reader, the reader including an RF receiver.

Claim 25 (original): A method in accordance with claim 24 wherein the valve is a fluid-operated valve, wherein the valve includes a valve positioner, an electrical conductor, and an I/P transducer coupled to the valve positioner by the electrical conductor, and wherein the method comprises coupling at least one of the plurality of RFID sensor assemblies to the electrical conductor.

Claim 26 (original): A method in accordance with claim 24 wherein the valve is a fluid-operated valve, wherein the valve includes a pneumatic actuator, a valve stem coupled to the pneumatic actuator, and an actuator-valve stem coupler, and wherein the method comprises coupling at least one of the plurality of RFID sensor assemblies to the actuator-valve stem coupler.

Claim 27 (original): A method in accordance with claim 24 wherein the valve is a fluid-operated valve, wherein the valve includes a pneumatic actuator, a valve positioner, and a fluid conduit in fluid communication between the pneumatic actuator and the valve positioner, and wherein the method comprises coupling at least one of the plurality of RFID sensor assemblies to the fluid conduit between the pneumatic actuator and the valve positioner.

Claim 28 (previously presented): A method in accordance with claim 24 wherein the valve is a fluid-operated valve, wherein the valve includes a pneumatic actuator, a valve positioner, a booster, a first fluid conduit in fluid communication between the pneumatic actuator and the booster, a second fluid conduit in fluid communication between the booster and the valve positioner, and wherein the method comprises coupling at least one of the plurality of RFID

sensor assemblies to the first fluid conduit and coupling at least another one of the plurality of RFID sensor assemblies to the second fluid conduit.

Claim 29 (original): A method in accordance with claim 28 wherein a fluid supply line is in fluid communication with the booster, and wherein at least one of the plurality of RFID sensor assemblies is coupled to the fluid supply line.

Claim 30 (original): A method in accordance with claim 29 wherein a regulator valve is in fluid communication between the fluid supply line and the valve positioner, a conduit is between the regulator valve and the valve positioner, and wherein at least one of the plurality of RFID sensor assemblies is coupled to the conduit between the regulator valve and the valve positioner.

Claim 31 (original): A method in accordance with claim 24 wherein a conduit is upstream of the valve and a conduit is downstream of the valve, wherein at least one of the plurality of RFID sensor assemblies is coupled to the conduit upstream of the valve and at least another one of the plurality of the RFID assemblies is coupled to the conduit downstream of the valve.

Claim 32 (original): A method in accordance with claim 24 wherein the valve includes a seat and wherein the method comprises using the RFID sensor assemblies to determine valve seating force.

Claim 33 (original): A method in accordance with claim 24 wherein the valve includes a spring and wherein the method comprises using the RFID sensor assemblies to determine a spring preload of the spring.

Claim 34 (original): A method in accordance with claim 24 wherein the valve includes a spring and wherein the method comprises using the RFID sensor assemblies to determine a spring constant of the spring.

Claim 35 (original): A method in accordance with claim 24 wherein the valve includes a spring and wherein the method comprises using the RFID sensor assemblies to determine spring compression.

Claim 36 (original): A method in accordance with claim 24 and comprising using the RFID sensor assemblies to determine a friction load on the valve.

Claim 37 (original): A method in accordance with claim 24 and comprising using the RFID sensor assemblies to determine valve position.

Claim 38 (original): A method in accordance with claim 24 and comprising using the RFID sensor assemblies to determine valve stroke times.

Claims 39-45 (cancelled).

Claim 46 (new): A system comprising:

a pneumatic valve including a pneumatic actuator, a valve stem coupled to the pneumatic actuator, and an actuator-valve stem coupler;

a plurality of RFID sensor assemblies coupled to the valve to monitor a plurality of parameters associated with the valve, at least one of the plurality of RFID sensor assemblies is coupled to the actuator-valve stem coupler, respective RFID sensor assemblies including a microprocessor and nonvolatile memory and being configured to store a unique identification number in the nonvolatile memory;

a control tag configured to wirelessly communicate with the respective RFID sensor assemblies that are coupled to the valve, the control tag being further configured to communicate with an RF reader; and

an RF reader configured to selectively communicate with the control tag, the reader including an RF receiver and the RF reader defining a web server.

Claim 47 (new): A system in accordance with claim 46 wherein the valve includes a valve positioner, a conductor, and an I/P transducer coupled to the valve positioner by the conductor, and wherein at least one of the plurality of RFID sensor assemblies is coupled to the conductor.

Claim 48 (new): A system in accordance with claim 47 wherein the valve includes a fluid conduit in fluid communication between the pneumatic actuator and the valve positioner, and wherein at least one of the plurality of RFID sensor assemblies is coupled to the fluid conduit between the pneumatic actuator and the valve positioner.

Claim 49 (new): A system in accordance with claim 47 wherein the valve includes a booster, a first fluid conduit in fluid communication between the pneumatic actuator and the booster, a second fluid conduit in fluid communication between the booster and the valve positioner, and wherein at least one of the plurality of RFID sensor assemblies is coupled to the first fluid

conduit and at least another one of the plurality of RFID sensor assemblies is coupled to the second fluid conduit.

Claim 50 (new): A system in accordance with claim 49 and further comprising a fluid supply line in fluid communication with the booster, and wherein at least one of the plurality of RFID sensor assemblies is coupled to the fluid supply line.

Claim 51 (new): A system in accordance with claim 50 and further comprising a regulator valve in fluid communication between the fluid supply line and the valve positioner, a conduit between the regulator valve and the valve positioner, and wherein at least one of the plurality of RFID sensor assemblies is coupled to the conduit between the regulator valve and the valve positioner.

Claim 52 (new): A system comprising:

a pneumatic valve including a diaphragm actuator, a valve stem coupled to the diaphragm actuator, and an actuator-valve stem coupler;

a plurality of RFID sensor assemblies coupled to the valve to monitor a plurality of parameters associated with the valve, at least one of the plurality of RFID sensor assemblies is coupled to the actuator-valve stem coupler,

respective RFID sensor assemblies including a microprocessor and nonvolatile memory and being configured to store a unique identification number in the nonvolatile memory;

a control tag configured to wirelessly communicate with the respective RFID sensor assemblies that are coupled to the valve, the control tag being further configured to communicate with an RF reader; and

an RF reader configured to selectively communicate with the control tag, the reader including an RF receiver;

a conduit upstream of the valve; and

a conduit downstream of the valve, at least one of the plurality of RFID sensor assemblies being coupled to the conduit upstream of the valve and at least another one of the plurality of the RFID assemblies being coupled to the conduit downstream of the valve.

Claim 53 (new): A system in accordance with claim 52 wherein the valve includes a seat and wherein the RFID sensor assemblies are used to determine valve seating force.

Claim 54 (new): A system in accordance with claim 53 wherein the diaphragm actuator includes a diaphragm and a spring operating on the diaphragm, and wherein the RFID sensor assemblies are used to determine a spring preload of the spring.

Claim 55 (new): A system in accordance with claim 54 wherein the RFID sensor assemblies are used to determine a spring constant of the spring.

Claim 56 (new): A system in accordance with claim 55 wherein the RFID sensor assemblies are used to determine spring compression.

Claim 57 (new): A system in accordance with claim 52 wherein the RFID sensor assemblies are used to determine a friction load on the valve.

Claim 58 (new): A system in accordance with claim 57 wherein the RFID sensor assemblies are used to determine valve position.

Claim 59 (new): A system in accordance with claim 58 wherein the RFID sensor assemblies are used to determine valve stroke times.